

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of treating a condition in a patient requiring removal or destruction of **the patient's** cells comprising administering to a mammal in need a therapeutically effective amount of a neural thread protein (NTP).

2. (Original) The method according to claim 1, wherein said NTP is administered by a method selected from the group consisting of orally, subcutaneously, intradermally, intravenously, intramuscularly, intrathecally, intraperitoneally, intracerebrally (intraparenchymally), intracerebroventricularly, intraocularly, intraarterially, intranasally, intratumorally, intralesionally, topically, and transdermally.

3. (Original) The method of claim 1, wherein said treatment is administered to the patient before, during, or after treatment of the patient selected from the group of treatments consisting of surgical excision, transplantation, grafting, chemotherapy, immunotherapy, vaccination, thermal, microwave or electrical ablation, cryotherapy, laser therapy, phototherapy, gene therapy, and radiation.

4. (Original) The method of claim 1, where the condition is selected from the group consisting of a benign or malignant tumor of a tissue selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

5. (Original) The method of claim 1, where the condition is selected from the group consisting of a hyperplasia, hypertrophy, or overgrowth of a tissue selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

6. (Original) The method of claim 5, wherein the condition is tonsillar hypertrophy.

7. (Original) The method of claim 5, wherein the condition is prostatic hyperplasia.

8. (Withdrawn) The method of claim 1, where the condition is selected from the group consisting of a virally, bacterially, or parasitically altered tissue selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

9. (Original) The method of claim 1, where the condition is selected from the group consisting of a malformation of a tissue selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

10. (Withdrawn) The method of claim 1, wherein the condition is a cosmetic modification to a tissue.
11. (Withdrawn) The method of claim 10, wherein the tissue is selected from the group consisting of skin, eye, ear, nose, throat, mouth, muscle, connective, adipose, hair, and breast.
12. (Withdrawn) The method of claim 1, wherein the condition is a vascular disease.
13. (Withdrawn) The method of claim 1, wherein the condition is hemorrhoids.
14. (Withdrawn) The method of claim 1, wherein the condition is varicose veins.
15. (Withdrawn) The method of claim 12, wherein the vascular disease is atherosclerosis or arteriosclerosis.
16. (Withdrawn) The method of claim 1, wherein the condition is selected from the group consisting of an inflammatory disease, autoimmune disease, metabolic disease, hereditary/genetic disease, traumatic disease or physical injury, nutritional deficiency disease, infectious disease, amyloid disease, fibrosis disease, storage disease, congenital malformation, enzyme deficiency disease, poisoning, intoxication, environmental disease, radiation disease, endocrine disease, degenerative disease, and mechanical disease.
- Claims 17-19. (Canceled).
20. (Original) The method of claim 1, wherein the NTP is employed in combination with other pharmaceutical compositions, such as cytokines, growth factors, antibiotics, apoptotic-inducing agents, anti-inflammatories, and/or chemotherapeutic agents as is appropriate for the indication being treated.

Claims 21.-22. (Canceled).

23. (Previously Presented) The method of claim 1, wherein said NTP is chosen from the group consisting of AD7c-NTP (SEQ ID NO: 10), the proteins identified by SEQ ID NOs. 2 to 9, neural pancreatic thread protein, pancreatic thread protein and any fragments, homologs, variants, derivatives, peptide mimetics, reverse-D peptides, and enantiomers thereof.

24. (Previously Presented) The method according to claim 23, wherein said NTP is administered by a method selected from the group consisting of orally, subcutaneously, intradermally, intravenously, intramuscularly, intrathecally, intraperitoneally, intracerebrally (intraparenchymally), intracerebroventricularly, intraocularly, intraarterially, intranasally, intratumorally, intralesionally, topically, and transdermally.

25. (Previously Presented) The method of claim 23, wherein said treatment is administered to the patient before, during, or after treatment of the patient selected from the group of treatments consisting of surgical excision, transplantation, grafting, chemotherapy, immunotherapy, vaccination, thermal or electrical ablation, cryotherapy, laser therapy, phototherapy, gene therapy, and radiation.

26. (Previously Presented) The method of claim 23, where the condition is a benign or malignant tumor of a tissue selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

27. (Previously Presented) The method of claim 23, where the condition is selected from the group consisting of a hyperplasia, hypertrophy, or overgrowth of a tissue

selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

28. (Original) The method of claim 27, wherein the condition is tonsillar hypertrophy.

29. (Original) The method of claim 27, wherein the condition is prostatic hyperplasia or hemorrhoids.

30. (Withdrawn) The method of claim 23, where the condition is selected from the group consisting of a virally, bacterially, or parasitically altered tissue selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

31. (Previously Presented) The method of claim 23, where the condition is selected from the group consisting of a malformation of a tissue selected from the group consisting of lung, breast, stomach, pancreas, prostate, bladder, bone, ovary, skin, kidney, sinus, colon, intestine, stomach, rectum, esophagus, heart, spleen, salivary gland, blood, brain and its coverings, spinal cord and its coverings, muscle, connective tissue, adrenal, parathyroid, thyroid, uterus, testis, pituitary, reproductive organs, liver, gall bladder, eye, ear, nose, throat, tonsils, mouth, and lymph nodes and lymphoid system.

32. (Withdrawn) The method of claim 23, wherein the condition is a cosmetic modification to a tissue.

33. (Withdrawn) The method of claim 32, wherein the tissue is selected from the group consisting of skin, eye, ear, nose, throat, mouth, muscle, connective, adipose, hair, and breast.

34. (Withdrawn) The method of claim 23, wherein the condition is a vascular disease.

35. (Withdrawn) The method of claim 23, wherein the condition is hemorrhoids.

36. (Withdrawn) The method of claim 23, wherein the condition is varicose veins.

37. (Withdrawn) The method of claim 30, wherein the vascular disease is atherosclerosis or arteriosclerosis.

38. (Withdrawn) The method of claim 23, wherein the condition is selected from the group consisting of an inflammatory disease, autoimmune disease, metabolic disease, hereditary/genetic disease, traumatic disease or physical injury, nutritional deficiency disease, infectious disease, amyloid disease, fibrosis disease, storage disease, congenital malformation, enzyme deficiency disease, poisoning, intoxication, environmental disease, radiation disease, endocrine disease, degenerative disease, and mechanical disease.

Claims 39-42. (Canceled).

43. (Original) The method of claim 23, wherein the NTP is employed in combination with other pharmaceutical compositions, such as cytokines, growth factors,

antibiotics, apoptotic-inducing agents, anti-inflammatories, and/or chemotherapeutic agents as is appropriate for the indication being treated.

Claims 44.-45. (Canceled).

46. (Withdrawn) A method of treating a condition in a patient requiring removal or destruction of cells comprising administering to a tumor or other target cell a therapeutically effective amount of an NTP gene, wherein the expression of the NTP gene is induced resulting in expression of the NTP protein.

47. (Currently Amended) A method of treating a condition in a patient requiring removal or destruction of cells comprising administering to a mammal in need a therapeutically effective amount of a neural thread protein (NTP), wherein the NTP is administered at the site of the cells requiring removal or destruction, **and wherein the condition is selected from the group consisting of a tumor, hyperplasia, hypertrophy, overgrowth of tissue, unwanted hair, and a wart.**

48. (Previously Presented) The method of claim 47, wherein the NTP comprises SEQ ID NO: 10.

49. (Previously Presented) The method of claim 47, wherein the NTP is administered topically.

50. (Previously Presented) The method of claim 47, wherein the NTP is administered by injection.

51. (Previously Presented) The method of claim 47, wherein the condition is a tumor.

52. (New) The method of claim 47, wherein said NTP is chosen from the group consisting of the proteins identified by SEQ ID NOs. 2 to 9, neural pancreatic thread protein, and pancreatic thread protein.

53. (New) The method of claim 1, wherein said NTP is chosen from the group consisting of the proteins identified by SEQ ID NOs. 2 to 9, neural pancreatic thread protein, and pancreatic thread protein.

54. (New) The method of claim 47, wherein said NTP comprises a peptide at least 75% identical to SEQ ID NO: 10.